Motorola 52nd Street Superfund Site
Community Advisory Group (CAG) Meeting

Thursday, August 11, 2005
6:00 p.m. to 8:00 p.m.
ADEQ - Room 250
1110 West Washington, Phoenix, Arizona

MINUTES

Members in Attendance:
Hildellred Chambers Ad
Martha Breitenbach
Rey Covarrubias
Jeanne Lindsay
Ruth Ann Marston
Mary Moore
Doug Tucker
Patricia Zermeno

ADEQ Staff in Attendance:
Kris Paschall, ADEQ Project Manager
David Haag, ADEQ Project Hydrologist
Linda Mariner, ADEQ Community Involvement Coordinator
Veronica Garcia, ADEQ Outreach Unit Manager

EPA Staff in Attendance:
Janet Rosati, EPA Remedial Project Manager
Viola Cooper, EPA Community Involvement Coordinator
Nadia Hollan, EPA Remedial Project Manager

ADEQ Contractor:
Brad Cross, LFR Levine Fricke
Bob Forsberg, LFR Levine Fricke
John Kivett, LFR Levine Fricke

Others in Attendance:
Barbara Murphy
Bob Frank
Tim Graves
Rhea Lowell
Jerry Worsham
Carrolette Winstead
Marla Miller
Michael Long
Cynthia Parker
Tom Suriano
Judy Heywood
Troy Meyer
Don Stoltzfus
Todd Cruse
Mario Castaneda
Dave Eckenrode
David Martinez
Lupe Buys
Dan Casiraro
Pete Span
Jim Oliver
Doug Bartlett
Tom Padgett
Nancy Nesky
Jennie Sales
Rene Chase Dufault

OU# 07-016

1. Call to Order and Introductions - Linda Mariner, ADEQ Community Involvement Coordinator

Ms. Mariner opened the meeting. All ADEQ staff, EPA staff, Community Advisory Group (CAG) members, Company Representatives, and audience members introduced themselves.

2. ADEQ Response to Honeywell's Draft Focused Remedial Investigation (FRI) Report – Introduction by Kris Paschall, ADEQ Project Manager

Ms.Paschall provided an introduction to the presentations with the following background information:

- Discussion of Operative Units (OUs)
  - OU1 overview (timeline introduced)
  - OU2 overview (timeline for OU2 area)

- OU3 overview

- Honeywell 34th Street facility overview
  - Timeline of Honeywell work
- Discussed OU2 Remedial Investigation (RI) done by Motorola
- Overview of Honeywell's requirements set forth in the Administrative Order on Consent (AOC) to complete an FRI of its 34th Street Facility
- AOC Scope of Work consists of 3 phases: Research Report, Potential Source Area Investigation, and Additional Site Characterization
  - Discussed historical research and the requirements of the EPA 1988 Remedial Investigation/Feasibility Study (RI/FS) Guidance
    - Research Report was not approved by ADEQ
  - Potential Source Area Investigation Report was not approved by ADEQ
  - The draft FRI was not prepared in accordance with RI/FS Guidance

3. ADEQ Comments to Honeywell FRI Report – Part 1 by Brad Cross, LFR Levine Fricke (ADEQ Contractor)

This presentation focused on ADEQ's major issues with Honeywell's draft FRI report. The comments were extensive and could not all be covered in one meeting. Mr. Cross provided and discussed a conceptual model of the area/site. LFR incorporated data from borings into the Environmental Visualization Software (EVS) which provides a 3D visualization of the data. The presentation included a discussion of the area and visually showed aerials and wells. The second set of visuals included an aerial, bedrock surface, wells, water table information, groundwater contours and cone of depressions for OU1 and OU2. The third set of visuals included information on bedrock, water table, and aerial which depicted an overview of the groundwater contours and interactions with the bedrock ridge.

Several questions were asked at this point relating to the amount of rise for water to move over the bedrock ridge and on alluvial thickness.

Mr. Cross provided an overview of the lithology that consists of the A, B, C, and D units. At this point numerous questions were asked from the CAG members relating to the EVS presentation. Mr. Cross provided additional views of the model to illustrate and answer questions.

A lot of questions centered on bedrock flow and the potential for contamination to be encountered within the fractured bedrock. Mr. Cross stated that high concentrations have been found in the bedrock at OU1. There was a question related to the amount of flow from the bedrock unit and how difficult it was to quantify. Aquifer tests have been performed and the assessment of the bedrock flow depended on whether or not the amount of water flowing through the bedrock fractures was substantially lower than the amount flowing through the alluvium. The critical analysis was to find out how much contamination was fluxing out of the bedrock and how that impacted the water in the upper aquifer. Mr Cross said that was something that would have to be determined at a later date. Mr. Cross also provided methods of determining flow within the bedrock unit.

Mr. Cross showed additional information on the gradients, OU2 capture, groundwater flow around the ridge and OU1 capture. Mr. Cross discussed the effects of flow in the Salt River and how groundwater moves through the system when recharge events occur. ADEQ had a lot of comments on this issue and had requested Honeywell to conduct an analysis to determine the gradient shifts and how that impacted the transport of contaminants from the Honeywell facility.

Mr. Cross introduced a timeline for the Honeywell facility that ranged between 1950 and 2005. The timeline depicted the use of TCE, jet fuel, and TCA at the facility as well as documented releases. It also showed periods of usage and the start of the investigations. There were several large periods of time between when releases could have occurred and when the investigation was started.

Mr. Cross provided an overview of general comments to the FRI Report and explained that for ease of understanding, the comments were divided into 5 categories. He then gave some examples of comments for each category. These were not all inclusive and were covered in more detail in ADEQ's comments which were provided to the CAG members and the audience.

- The Draft FRI Report did not satisfy the minimum requirements of the AOC or EPA guidance in the following ways:
  - Lacked detailed summary of the potential source areas
  - Failed to establish the extent or potential extent of Honeywell's contaminant plume
  - Did not adequately assess the potential sources and impacts to groundwater
  - Did not conform with the 1988 EPA guidance for conducting an RI/FS
  - Provided a limited analysis of the fate and transport of contaminants
- The key findings and conclusions were not well supported. Mr. Cross stated that the conclusions were qualitative or theoretical and were not solid conclusions based on data analysis. He then provided examples of this in the FRI Report.
- The report often presented a biased analysis or an analysis that was based on assumptions not necessarily conservative. Mr. Cross then provided examples of this in the FRI Report.
- The report lacked the necessary details in the following ways:
  - Selective data – chose some data and ignored other data
  - Did not quantify contaminant extent or volume
  - Implied that no historical sources existed because there were no continuing sources now
  - No use of analytical and numerical modeling and not enough information on fate and transport
- The report omitted important information.

Questions from the CAG and the public prompted a long discussion involving the following topics:

- Gradient changes due to Salt River flow
- Differences on the conceptual models
- Spills
- Specific questions on ADEQ comments
- Explanation between a drywell and sump
- Concrete degradation of sumps
- Specific questions on Freescale's comments
- Adequate number of wells to characterize the plume and OU1
- Data gaps

4. ADEQ Comments to Honeywell's FRI Report – Part 2 by John Kivett of LFR Levine Fricke

Mr. Kivett provided additional insight to ADEQ's comments regarding the FRI Report. Mr. Kivett stated that ADEQ spent a lot of time providing directions as to how to respond to their comments in order to move forward and have a complete RI Report. Mr. Kivett explained that the list of ADEQ directions to Honeywell in this presentation was not all inclusive since ADEQ's comments were very detailed. He categorized the main topics for ADEQ's required revisions to the FRI Report in the following list:

- Include estimated volumes
  - Need to use purchasing records, process engineers, etc.
    (Numerous questions were raised from CAG members and the public which involved issues surrounding estimated volumes, records available at the facility, record keeping requirements, mass balances requirements and requirements for PRPs to fully define contamination that is emanating from facilities.)
- Include a prioritization of sources
  - Since the Research Report, ADEQ has been requesting Honeywell to prioritize its potential sources in order to focus the remedial investigation.
- Provide more detail on hydrogeology
  - For example: lithology units, groundwater flow in each unit, flood events
- Characterize nature and extent of contamination
  - Assertions/conclusions are not supported by data

  (Questions from CAG members involved releases in the area of monitoring well ASE-22B and whether ADEQ was looking east and south of the site. One member also asked how far north the wells were located. Mr. Kivett responded that the PRP search would be used to determine upgradient sources.)
- Provide more information on fate and transport; this is the most critical analyses that will be used to support the FS and final remedy
  - Use analytical or numerical modeling to determine fate and transport

Numerous questions were raised by both CAG members and the public involving data needs, the UST investigation in relation to the TCE plume, TCE/TCA chemical characteristics in soil and groundwater, and use of calcium chloride to clean up fuels.

5. ADEQ Comments to Honeywell's Draft FRI Report – Conclusion by Kris Paschall

Ms.Paschall finished the presentation by providing information regarding the next steps in the process to get the FRI Report approved.

CALL TO PUBLIC

The remainder of the meeting was spent fielding questions from both CAG members and the public.

Future Meeting Plans

The meeting was concluded with Ms. Mariner asking for potential topics to be discussed at the next meeting. These included:

- APS or OU3 work plan
- Updates from PRPs.
- OU1 Final Feasibility Study
- TAG report